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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/801,793
Filing Date: March 16, 2004
Appellant(s): CHERKASOVA ET AL.

Fred G. Pruner, Jr. (Reg. No. 40,779)
For Appellant

EXAMINER'S ANSWER

1. This is in response to the appeal brief filed December 12, 2008 appealing from the Office action mailed July 15, 2008.

Real Party in Interest

2. The appellants' statement identifying the real party in interest contained in the brief is correct.

Related Appeals and Interferences

3. The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Status of Claims

4. The appellants' statement of the status of claims contained in the brief is correct.

Status of Amendments

5. The appellants' statement of the status of amendments after contained in the brief is correct.

Summary of Claimed Subject Matter

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6. The appellants' summary of claimed subject matter contained in the brief is correct.

Grounds of Rejection to be Reviewed on Appeal

7. The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

Claims Appendix

8. The appellants' copy of the appealed claims contained in the Appendix to the brief is correct.

Evidence Relied Upon

2004/0111509	Eilam et al.	6-2004
5,890,162	Huckins	3-1999

Grounds of Rejection

9. The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 3-26, 28-32, 34-40, and 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eilam et al. (US 2004/0111509) in view of Huckins (US 5,890,162).

INDEPENDENT:

As per **claim 1**, Eilam teaches a method comprising:

receiving, into a capacity planning system, workload information representing an expected workload of client accesses of files from a site (see page 2, [0021]:

“optimization algorithm consolidating the workload forecast and the contract information”; and [0032]: “Traffic and workload are monitored continuously and logged at a storage device”);

receiving, into said capacity planning system, at least one service parameter that defines a desired service characteristic to be provided by a server configuration under the expected workload (see page 2, [0021]: “optimization algorithm consolidating the workload forecast and the contract information”; [0023]-[0024]: “parameters”; and [0022]: “Multi-Layer Infrastructure Service Level Agreement (MLISLA)”) and defines a desired service characteristic to be provided by a media server configuration during periods of service under the expected workload (see page 2, [0021]: “servers are proactively allocated to customers according to expected workload... forecasting methods that can differentiate between temporary fluctuations in the workload and real workload changes” and page 3, [0035]: “to generate a forecast”); and

determining, by said capacity planning system, for at least one server configuration, how many servers of said at least one server configuration to be included at said site for supporting the expected workload in compliance with said at least one service parameter (see page 2, [0020]: “allocate servers according to the expected workload as well as the current workload” & [0033]: “A Resource Manager (RM) is responsible for making allocation decisions in real time based on the RAP and the monitored workload”).

Eilam does not explicitly teach client accesses of files from a site are streaming media files or that the server is a media server.

Huckins teaches streaming media files and a media server (see col.1, lines 35-39 & lines 43-45).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Eilam in view of Huckins so that client accesses of files from a site are streaming media files or that the server is a media server. One would be motivated to do so because Eilam teaches the present invention is applicable via the Internet (see page 1, [0001]) comprising a Server Farm (see page 1, [0002]). Therefore, one of ordinary skill in the art would agree that multimedia server and streaming multimedia files are accessed via the Internet.

Eilam does not explicitly teach that the period of service is during degraded service.

However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The receiving, into said

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capacity planning system, at least one service parameter that defines a desired service characteristic to be provided by a server configuration under the expected workload will be performed regardless of the conditional period of operation. Thus this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate any conditional period of operation (non-compliant, compliant, overloaded, under loaded, degraded, and so on) because such data does not functionally relate to the receiving step in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

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As per **claim 11**, Eilam teaches a method comprising:

receiving, into a capacity planning tool, information about a first server configuration;

receiving, into said capacity planning tool, workload information representing an expected workload of client accesses of files from a site (see page 2, [0021]:

“optimization algorithm consolidating the workload forecast and the contract information”; and [0032]: “Traffic and workload are monitored continuously and logged at a storage device”);

receiving, into said capacity planning system, at least one performability parameter that defines a desired service characteristic to be provided by a server configuration during periods of operation under the expected workload (see page 2, [0021]: "servers are proactively allocated to customers according to expected workload... forecasting methods that can differentiate between temporary fluctuations in the workload and real workload changes"; [0023]-[0024]: "parameters"; and page 3, [0035]: "to generate a forecast"); and

said capacity planning tool determining how many servers of said first server configuration to be included at said site for supporting the expected workload in compliance with said at least one performability parameter (see page 2, [0020]: "allocate servers according to the expected workload as well as the current workload" & [0033]: "A Resource Manager (RM) is responsible for making allocation decisions in real time based on the RAP and the monitored workload").

Eilam does not explicitly teach client accesses of files from a site are streaming media files or that the server is a media server.

Huckins teaches streaming media files and a media server (see col.1, lines 35-39 & lines 43-45).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Eilam in view of Huckins so that client accesses of files from a site are streaming media files or that the server is a media server. One would be motivated to do so because Eilam teaches the present invention is applicable via the Internet (see page 1, [0001]) comprising a Server Farm (see page 1,

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[0002]). Therefore, one of ordinary skill in the art would agree that multimedia server and streaming multimedia files are accessed via the Internet.

Although Eilam teaches receiving, into said capacity planning system, at least one performability parameter that defines a desired service characteristic to be provided by a server configuration during periods of operation under the expected workload (see rejection above), Eilam is silent that the period of operation is during non-compliant period of operation.

However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The receiving, into said capacity planning system, at least one performability parameter that defines a desired service characteristic to be provided by a server configuration during periods of operation under the expected workload will be performed regardless of the conditional period of operation. Thus this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate any conditional period of operation (non-compliant, compliant, overloaded, under loaded, degraded, and so on) because such data does not functionally relate to the receiving step in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

As per **claim 22**, Eilam teaches a method comprising:

receiving, into a capacity planning tool, workload information representing an expected workload of client accesses of files over a period of time T (see page 2, [0021]: “optimization algorithm consolidating the workload forecast and the contract information” & [0032]: “Traffic and workload are monitored continuously and logged at a storage device”);

said capacity planning tool determining, for at least one server configuration under evaluation, an amount of overload encountered by said at least one media server configuration during each of a plurality of time intervals (see page 3, [0036]-[0037]: “where t is the time index”) of said expected workload (see page 2, [0020]: “allocate servers according to the expected workload as well as the current workload” & [0033]: “A Resource Manager (RM) is responsible for making allocation decisions in real time based on the RAP and the monitored workload”); and

said capacity planning tool receives at least one performability parameter that defines a desired limit on the amount encountered by a media server configuration under the expected workload (see page 2, [0023]-[0024]: “parameters”; and page 3, [0034]: Threshold events are generated according to the current load. The Resource Manager (RM) 101 allocates or de-allocates servers according to these threshold values”; and page 5, [0071]: “a bound or preset limit may be imposed”).

Eilam does not explicitly teach client accesses of files from a site are streaming media files or that the server is a media server.

Huckins teaches streaming media files and a media server (see col.1, lines 35-39 & lines 43-45).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Eilam in view of Huckins so that client accesses of files from a site are streaming media files or that the server is a media server. One would be motivated to do so because Eilam teaches the present invention is applicable via the Internet (see page 1, [0001]) comprising a Server Farm (see page 1, [0002]). Therefore, one of ordinary skill in the art would agree that multimedia server and streaming multimedia files are accessed via the Internet.

Eilam is silent that the desired limit is on the amount of continuous overload encountered.

However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The receiving, into said capacity planning system, at least one performability parameter that defines a desired limit encountered under the expected workload will be performed regardless of the conditional workload encountered. Thus this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate any conditional workload encountered (non-compliant, compliant, overloaded, under loaded, degraded, and so on) because

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such data does not functionally relate to the receiving step in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

As per **claim 30**, Eilam teaches a method comprising:

receiving, into a capacity planning tool, workload information identifying an expected workload of client accesses of files from a server over a period of time T (see page 2, [0021]: “optimization algorithm consolidating the workload forecast and the contract information” & [0032]: “Traffic and workload are monitored continuously and logged at a storage device”);

determining, by said capacity planning tool, an interval overload profile for a server configuration under evaluation, wherein said interval overload profile specifies an amount of overload of said server configuration for each of a plurality of time intervals of duration I of said expected workload, where $I < T$ (see page 3, [0035]); and

said capacity planning tool determining based at least in part on the interval overload profile whether said media server configuration under evaluation supports the expected workload in compliance with defined service parameters that define service characteristics desired by a service provider (see page 2, [0023]-[0024]: “parameters”; and page 3, [0036]: “The RM employs a Resource Control Algorithm (RCA) to make allocation decisions in real time according to the RAP and the alerts of the STFM, taking into account also the MLISLAs”), wherein said defined service parameters include at least one performability parameter that defines a desired limit encountered by a media

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server configuration under the expected workload (see page 3, [0034]: Threshold events are generated according to the current load. The Resource Manager (RM) 101 allocates or de-allocates servers according to these threshold values”; and page 5, [0071]: “a bound or preset limit may be imposed”).

Eilam does not explicitly teach client accesses of files from a site are streaming media files or that the server is a media server.

Huckins teaches streaming media files and a media server (see col.1, lines 35-39 & lines 43-45).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Eilam in view of Huckins so that client accesses of files from a site are streaming media files or that the server is a media server. One would be motivated to do so because Eilam teaches the present invention is applicable via the Internet (see page 1, [0001]) comprising a Server Farm (see page 1, [0002]). Therefore, one of ordinary skill in the art would agree that multimedia server and streaming multimedia files are accessed via the Internet.

Eilam is silent that the desired limit is on the amount of continuous overload encountered.

However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The receiving, into said capacity planning system, at least one performability parameter that defines a desired limit encountered under the expected workload will be performed regardless of the conditional workload encountered. Thus this descriptive material will not distinguish the

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claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate any conditional workload encountered (non-compliant, compliant, overloaded, under loaded, degraded, and so on) because such data does not functionally relate to the receiving step in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

As per **claim 36**, Eilam teaches a system comprising:

means for receiving workload information representing an expected workload of client accesses of files from a site over a period of time T (see page 2, [0021]:

“optimization algorithm consolidating the workload forecast and the contract information”; and [0032]: “Traffic and workload are monitored continuously and logged at a storage device”); and

means for determining, for at least one server configuration under evaluation, an amount of overload encountered by said at least one server configuration during servicing each of a plurality of time intervals (see page 3, [0036]-[0037]: “where t is the time index”) of said expected workload (see page 2, [0020]: “allocate servers according to the expected workload as well as the current workload” & [0033]: “A Resource

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Manager (RM) is responsible for making allocation decisions in real time based on the RAP and the monitored workload"); and

a means for receiving at least one performability parameter that defines a desired limit encountered by at least one media server configuration (see page 2, [0023]-[0024]: "parameters"; and page 3, [0034]: Threshold events are generated according to the current load. The Resource Manager (RM) 101 allocates or de-allocates servers according to these threshold values").

Eilam does not explicitly teach client accesses of files from a site are streaming media files or that the server is a media server.

Huckins teaches streaming media files and a media server (see col.1, lines 35-39 & lines 43-45).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Eilam in view of Huckins so that client accesses of files from a site are streaming media files or that the server is a media server. One would be motivated to do so because Eilam teaches the present invention is applicable via the Internet (see page 1, [0001]) comprising a Server Farm (see page 1, [0002]). Therefore, one of ordinary skill in the art would agree that multimedia server and streaming multimedia files are accessed via the Internet.

Eilam is silent that the desired limit is on the amount of continuous overload encountered.

However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The receiving, into said

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capacity planning system, at least one performability parameter that defines a desired limit encountered under the expected workload will be performed regardless of the conditional workload encountered. Thus this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate any conditional workload encountered (non-compliant, compliant, overloaded, under loaded, degraded, and so on) because such data does not functionally relate to the receiving step in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

As per **claim 44**, Eilam teaches a system comprising:

a media profiler operable to receive workload information for a service provider's site and generate a workload profile for a server configuration under consideration for supporting the service provider's site (see page 2, [0021]: "optimization algorithm consolidating the workload forecast and the contract information" & [0032]: "Traffic and workload are monitored continuously and logged at a storage device"); and

a capacity planner operable to receive the generated workload profile for the server configuration under consideration and determine how many servers of said server configuration are needed to provide a media server solution having sufficient

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capacity for supporting the site's workload in compliance with defined performability parameters provided by said media server solution during periods of service (see page 2, [0021]: "servers are proactively allocated to customers according to expected workload... forecasting methods that can differentiate between temporary fluctuations in the workload and real workload changes"; [0023]-[0024]: "parameters"; page 3, [0035]: "to generate a forecast"; and page 3, [0036]: "The RM employs a Resource Control Algorithm (RCA) to make allocation decisions in real time according to the RAP and the alerts of the STFM, taking into account also the MLISLAs").

Eilam does not explicitly teach client accesses of files from a site are streaming media files or that the server is a media server.

Huckins teaches streaming media files and a media server (see col.1, lines 35-39 & lines 43-45).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Eilam in view of Huckins so that client accesses of files from a site are streaming media files or that the server is a media server. One would be motivated to do so because Eilam teaches the present invention is applicable via the Internet (see page 1, [0001]) comprising a Server Farm (see page 1, [0002]). Therefore, one of ordinary skill in the art would agree that multimedia server and streaming multimedia files are accessed via the Internet.

Eilam does not explicitly teach that the parameters specify a desired limit on degradation of quality of service during periods of degraded service.

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Eilam does however teach forecasting traffic and workload (see page 1, [0011]), supporting flexible and complex service level agreements (see page 2, [0022]), and based on the parameters allocating the appropriate number of servers (see page 2, [0022]-[0024]).

Furthermore, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The receiving, into said capacity planning system, at least one performability parameter that defines a desired limit encountered under the expected workload will be performed regardless of the conditional workload encountered. Thus this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate any limit on any conditional workload encountered (non-compliant, compliant, overloaded, under loaded, degraded, and so on) because such data does not functionally relate to the receiving step in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

DEPENDENT:

As per **claim 3**, which depends on claim 1, Eilam further teaches wherein said at least one performability parameter specifies a limit on the amount of degradation of service encountered during said periods of degraded service (see page 5, [0071]).

As per **claim 4**, which depends on claim 1, Eilam further teaches wherein said at least one performability parameter comprises at least one selected from the group consisting of: a regular-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods of performance degradation under regular system operation of a media server configuration, and a node-failure-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods in which one or more nodes of a clustered media server configuration have failed (see page 2, [0021]).

As per **claim 5**, which depends on claim 1, Eilam further teaches wherein said at least one performability parameter comprises a regular-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods of performance degradation under regular system operation of a media server configuration, and a node-failure-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods in which one or more nodes of a clustered media server configuration have failed (see page 2, [0021]).

As per **claim 6**, which depends on claim 1, Eilam further teaches wherein said at least one service parameter comprises at least one basic capacity parameter (see page 2, [0025]).

As per **claim 7**, which depends on claim 6, Eilam further teaches wherein said at least one basic capacity parameter comprises at least one selected from the group consisting of: a statistical demand guarantee that specifies a desired limit on the percentage of time that a media server configuration is overloaded under the expected workload, and a utilization constraint that specifies a desired limit on the percentage of time that a media server configuration is at or near its capacity under the expected workload (see page 2, [0025]).

As per **claim 8**, which depends on claim 6, Eilam further teaches wherein said at least one basic capacity parameter comprises a statistical demand guarantee that specifies a desired limit on the percentage of time that a media server configuration is overloaded under the expected workload, and a utilization constraint that specifies a desired limit on the percentage of time that a media server configuration is at or near its capacity under the expected workload (see page 2, [0025]).

As per **claim 9**, which depends on claim 6, Eilam further teaches wherein said at least one service parameter further comprises at least one performability parameter that defines a desired limit on the amount of degradation of service encountered during said percentage of time that a media server configuration is overloaded under the expected workload (see page 2, [0025]).

As per **claim 10**, which depends on claim 6, Eilam further teaches wherein said at least one service parameter further comprises at least one performability parameter that defines a desired limit on the amount of continuous overload encountered at any

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given time by a media server configuration under the expected workload (see page 2, [0025]).

As per **claim 12**, which depends on claim 11, Eilam further teaches wherein said non-compliant periods of operation comprise periods of degraded performance in servicing said expected workload (see col.2, [0021]).

As per **claim 13**, which depends on claim 12, Eilam further teaches wherein said degraded performance is performance in which said media server configuration is unable to satisfy real-time constraints of at least one stream being served (see col.2, [0021]).

As per **claim 14**, which depends on claim 12, Eilam further teaches wherein said degraded performance is performance in which said media server configuration is unable to serve at least one stream so as to avoid interruptions in the presentation of such stream (see page 2, [0022]).

As per **claim 15**, which depends on claim 12, Eilam further teaches wherein said degraded performance results from overload of said media server configuration (see page 2, [0022]).

As per **claim 16**, which depends on claim 11, Eilam further teaches wherein said non-compliant periods of operation comprise periods of at least one node failure of a clustered media server configuration (implicit: see page 2, [0025]).

As per **claim 17**, which depends on claim 11, Eilam teaches further comprising: receiving, into said capacity planning system, at least one basic capacity parameter that defines a desired service characteristic to be provided by a media server configuration

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during compliant periods of operation under the expected workload (see page 2, [0023]-[0028]).

As per **claim 18**, which depends on claim 17, Eilam further teaches wherein said compliant periods of operation comprise periods in which said media server configuration is not overloaded under the expected workload (see page 2, [0022]).

As per **claim 19**, which depends on claim 17, Eilam teaches further comprising: said capacity planning tool performing basic capacity planning to determine how many servers of said first server configuration to be included at said site for supporting the expected workload in compliance with said at least one basic capacity parameter (see page 2-page 3, [0034]).

As per **claim 20**, which depends on claim 19, Eilam teaches further comprising: said capacity planning tool determining how many servers of said first server configuration to be included at said site for supporting the expected workload in compliance with said at least one basic capacity parameter and said at least one performability parameter (see page 2-page 3, [0034]).

As per **claim 21**, which depends on claim 11, Eilam further teaches wherein said at least one performability parameter comprises at least one selected from the group consisting of: a regular-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods of performance degradation under regular system operation of said media server configuration, and a node-failure-mode overload constraint that specifies a desired limit on the amount of

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degradation in service that is encountered during periods in which one or more nodes of a clustered media server configuration have failed (see page 2, [0021]).

As per **claims 23 and 38**, which respectively depend on claims 22 and 36, Eilam further teaches where each of said plurality of time intervals have a size I where $I < T$ (see page 3, [0035]).

As per **claims 24, 31, and 39**, which respectively depend on claims 22, 30, and 36, Eilam further teaches wherein beginning points of each of said plurality of time intervals are separated by a Step amount (see page 2, [0032]).

As per **claims 25, 32, and 40**, which respectively depend on claims 24, 31, and 39, Eilam further teaches wherein said $\text{Step} < I$ (see page 3, [0035]).

As per **claim 26**, which depends on claim 24, Eilam and Suleiman do not explicitly teach wherein each of said intervals has duration of 1 hour and said Step is 1 minute.

However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. Continuous metric monitoring will be performed regardless of the data. Thus this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to allocate various intervals durations and Step minutes because such data does not functionally relate to the steps in the method

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claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

As per **claim 28**, which depends on claim 22, Eilam further teaches wherein said capacity planning tool evaluates said amount of overload encountered by said at least one media server configuration during each of said plurality of time intervals to determine whether said at least one media server configuration satisfies said at least one performability parameter (see page 3, [0035]).

As per **claim 29**, which depends on claim 22, Eilam further teaches wherein said at least one performability parameter comprises at least one selected from the group consisting of: a regular-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods of performance degradation under regular system operation of a media server configuration, and a node-failure-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods in which one or more nodes of a clustered media server configuration have failed (see page 2, [0021]).

As per **claim 34**, which depends on claim 30, Eilam further teaches wherein said capacity planning tool evaluates said interval overload profile for said media server configuration under evaluation to determine whether said media server configuration under evaluation satisfies said at least one performability parameter (see page 2, [0034]).

As per **claim 35**, which depends on claim 30, Eilam further teaches wherein said at least one performability parameter comprises at least one selected from the group

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consisting of: a regular-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods of performance degradation under regular system operation of a media server configuration, and a node-failure-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods in which one or more nodes of a clustered media server configuration have failed (see page 2, [0021]).

As per **claim 37**, which depends on claim 36, Eilam teaches further comprising: means for receiving information specifying duration of each of said time intervals (see page 2, [0032] and page 3, [0035]).

As per **claim 42**, which depends on claim 36, Eilam teaches further comprising: means for evaluating the determined amount of overload encountered by said at least one media server configuration under evaluation for each of said plurality of time intervals to determine whether said at least one media server configuration under evaluation satisfies said at least one performability parameter (see page 2, [0022]).

As per **claim 43**, which depends on claim 36, Eilam further teaches wherein said at least one performability parameter comprises at least one selected from the group consisting of: a regular-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods of performance degradation under regular system operation of said at least one media server configuration under evaluation, and a node-failure-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered

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during periods in which one or more nodes of a clustered media server configuration under evaluation have failed (see page 2, [0021]).

As per **claim 45**, which depends on claim 44, Eilam further teaches wherein said periods of degraded service comprises periods in which said media server configuration is unable to serve at least one stream so as to avoid interruptions in the presentation of such stream (see page 2, [0022]).

As per **claim 46**, which depends on claim 44, Eilam further teaches wherein said defined performability parameters comprise at least one selected from the group consisting of: a regular-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods of degraded service under regular system operation of said media server solution, and a node-failure-mode overload constraint that specifies a desired limit on the amount of degradation in service that is encountered during periods in which one or more nodes of a clustered media server solution have failed (see page 2, [0021]).

Response to Argument

11. As per appellants' arguments filed December 12 2008, the appellant(s) argue in substance:

(a) That the limitations of independent *claim 1*, specifically, "at least a parameter that defines a desired service characteristic to be provided by a media server configuration **during periods of degraded service** under an expected workload" (emphasis added, see Appeal Brief, page 12);

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that the limitations of dependent *claim 3*, specifically, “wherein said at least one performability parameter specifies a limit on the amount **of degradation** of service encountered **during said periods of degraded service**” (emphasis added, see Appeal Brief, page 13);

that the limitations of independent *claim 11*, specifically, “receiving, into said capacity planning system, at least one performability parameter that defines a desired service characteristic to be provided by a server configuration **during non-compliant periods of operation** under the expected workload” (emphasis added, see Appeal Brief, page 14);

that the limitation of independent *claim 22*, specifically, “receives at least one performability parameter that defines a desired limit on the amount **of continuous overload** encountered by a media server configuration under the expected workload” (emphasis added, see Appeal Brief, page 15);

that the limitation of independent *claim 30*, specifically, “defined service parameters include at least one performability parameter that defines a desired limit on the amount **of continuous overload** encountered by a media server configuration under the expected workload” (emphasis added, see Appeal Brief, page 16);

that the limitation of independent *claim 36*, specifically, “a means for receiving at least one performability parameter that defines a desired limit on the amount **of continuous overload** encountered by a media server configuration” (emphasis added, see Appeal Brief, page 17);

that the limitation of independent *claim 44*, specifically, “performability parameter that specifies a desired limit **on the degradation of quality of service** provided by said media server solution during periods of **degraded** service” (emphasis added, see Appeal Brief, pages 17-18) is not disclosed by Eilam or Huckins, alone or in combination.

In response to (a), the appellant(s) seem to be asserting that because the language of the claims are not explicitly used, that such limitations are not taught. In order for “desired service characteristic to be provided” or a “limits to be set” by any server during any condition, the conditions and responses must be set (ie. expected workload conditions; forecasted workload conditions). Eilam teaches servers are proactively allocated according to expected workload forecast and uses forecasting methods that can differentiate between temporary fluctuations in workload and real workload changes (see page 2, [0021]). Eilam further teaches continuously monitoring, logging and setting these forecasted conditions taking into account week days and weekends (see page 3, [0035]). Eilam goes on to teach Long-Term Forecast (LTF) for the next 24 hours and Short-Term Forecast (STF) for the next 10-20 minutes. Eilam also teaches on page 5, paragraph [0071] that bounds or preset limits may be imposed on the amount of servers (i.e. service) to be allocated. Clearly one of ordinary skill in the art will agree such forecast include periods of degraded service under the high expected workload as well as increased service under the low expected workload. Since the appellant(s) have not explicitly defined the functional conditions after a

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"degraded service" or "during non-compliant periods of operation" or the functionality after the conditional limits have been exceeded, the above teachings of Eilam which takes into account weekday, weekend, short term and long term conditions include all claimed conditions. Furthermore, whatever parameter conditions employed are subjective and does not functionally relate to the steps in the method claimed. The receiving of parameters and the determination of servers for allocation will be performed taking into account all possible conditions.

The limitations "**during periods of degraded service**" (see claim 1); "limit on the amount **of degradation**" (see claim 3); "**during non-compliant periods of operation**" (see claim 11); "limit on the amount **of continuous overload**" (claims 22, 30, and 36); and "limit **on the degradation of quality of service**" (see claim 44) read on the teachings of Eilam which takes into account weekday, weekend, short term and long term conditions.

Therefore, one of ordinary skill in the art at the time the invention was made will recognize that the teachings of Eilam which takes into account weekday, weekend, short term and long term conditions include non-compliant, compliant, overloaded, under loaded, degraded, during periods of non-compliant, compliant, overloaded, under loaded, degraded, and so on) because such data does not functionally relate to the receiving step in the method claimed and because the subjective interpretation of the condition of data does not patentably distinguish the claimed invention.

Related Proceeding(s) Appendix

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13. There are no copies of any decisions rendered by a court or the Board in any proceedings.

14. For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Michael Won/

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